Trend Study 9-11-00

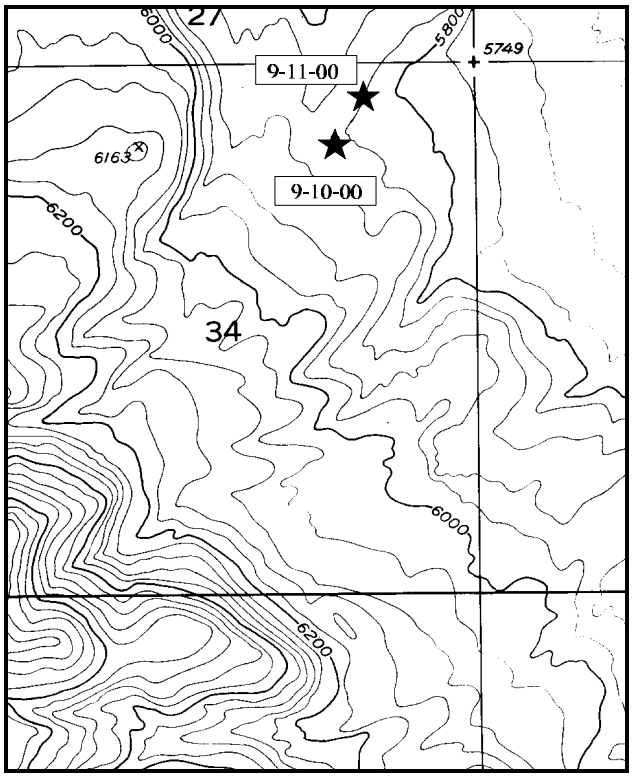
Study site name: Toliver Creek P-J . Range type: Pinyon-Juniper .

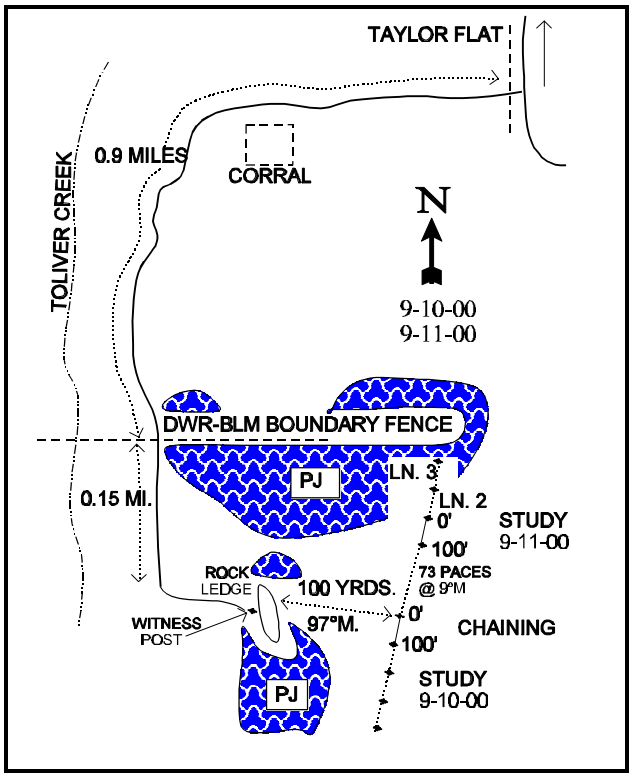
Compass bearing: frequency baseline 190°M .

First frame placement on frequency belts 5 feet. Frequency belt placement; line 1 (11 & 95ft), line 2 (34ft), line 3 (59ft.), line 4 (71ft).

LOCATION DESCRIPTION

From the trend study in the Toliver Creek chaining, study #9-10-00, walk 73 paces north (9°M) into the unchained patch of juniper and pinyon. The first stake encountered should be the 100-foot baseline stake. The start of the frequency baseline is 100 feet north (9°M).





Map Name: Warren Draw Diagrammatic Sketch

Township 2N , Range 24E , Section 34

DISCUSSION

Trend Study No. 9-11 (11-12)

*** This site was not read in 2000, but text from the 1995 report is included. Refer to the 1995 "Utah Big Game Range Trend Studies" report for maps and data tables for this site.

The Toliver Creek Pinyon-Juniper trend study is located in a mature pinyon-juniper stand adjacent to the chaining treatment sampled by trend study 9-10. This site represents the situation on the chained site before treatment. This type provides necessary escape and thermal cover, but forage is very limited.

The study is on a west-facing, 5% slope at an elevation of 5,900. The land is managed by the BLM. The soil, being shallow and sandy, is similar to that found on the adjacent study site. One apparent difference is the prevalence of exposed sandstone slabs, as opposed to the smaller, rounded rocks on the chained site. There is considerable runoff due to the lack of understory and light litter cover.

Using line intercept to estimate tree canopy cover, the juniper and pinyon overstory covers approximately 41% of the ground surface. Tree density was estimated at 298 juniper trees/acre and 108 pinyon trees/acre using the point-centered quarter method. Average diameter of juniper is 12 inches while that of pinyon is 4.3 inches. Most of the junipers have been high-lined. The only other browse sampled was pricklypear cactus and broom snakeweed.

Annual grasses and forbs were not included in the 1988 sample. No perennial forbs were observed on the study site that year and the only perennial grass encountered was a few bottlebrush squirreltail. Data from 1995 show that this depleted understory totals to only 6% cover. It is dominated by annuals which account for 89% of the grass cover and 99% of the forb cover.

1988 APPARENT TREND ASSESSMENT

Due to the lack of understory, there is very little vegetative ground cover. The litter cover associated with the mature juniper and pinyon is insubstantial and does not provide much soil protection. Rock cover is a significant percentage of the total cover at 27%, with percent bare ground at 24%. This site is in poor condition but the soil trend appears stable. The site does not support any useful browse except pinyon and juniper, which are most useful as thermal and escape cover. The herbaceous understory is in poor condition and depleted.

1995 TREND ASSESSMENT

Conditions are still poor but have improved, likely due to the unusually wet spring this year. Percent bare ground has declined to only about 8%, while cover for cryptogams has increased to almost 7%. Trend for soil is slightly up but still in poor condition. The only browse which occurs on the site consists of cactus and broom snakeweed, both are useless as forage. The herbaceous understory is in poor condition and dominated by annuals but has improved slightly since the last reading.

TREND ASSESSMENT
soil - slightly up, but still in poor condition (4)
browse - no useful species present (1)
herbaceous understory - slightly improved, but in very poor condition with a poor composition (4)